

TITLE OF THE INVENTION

IMAGE DISPLAY

BACKGROUND OF THE INVENTION

The present invention relates to an image display
5 for displaying image data on an image display part
constructed by a display pixel array.

Conventional techniques will be described
hereinbelow with reference to Figs. 8 and 9. Fig. 8
shows a first conventional example of an image display.
10 A data communication line for supplying compressed
image information and a CD-ROM 34 serving as a
database are connected to an image data generating
apparatus 81. Image data generated by the image data
generating apparatus 81 is sequentially inputted to a
15 liquid crystal driver 82 serving as an image data
writing means. The liquid crystal driver 82 transfers
the image data to a TFT liquid crystal panel 84
constructed by a pixel array. A shift register 83 is
provided at the end of the TFT panel 84.

20 The operation of the first conventional technique
will be described. In accordance with a request of the
image data generating apparatus 81, image information
compressed according to the MPEG1 standard is supplied
from the communication line or the CD-ROM 34 to the
25 image data generating apparatus 81. The image data

generating apparatus 81 sequentially inputs image data of each frame to the liquid crystal driver 82. Each time the image data of pixels of one horizontal line is accumulated, the liquid crystal driver 82 inputs 5 the image data pixels of one horizontal line in a lump to the TFT liquid crystal panel 84. The shift register 83 sequentially designates the row on the pixel array to which the image data is inputted.

The image display having such a TFT liquid crystal 10 display is described in the journal of IEICE (the Institute of Electronics, Information, and Communication Engineers), Vol. 78, No. 7, pp. 662 to 667, July, 1995, and the like.

Fig. 9 shows a second conventional technique of 15 the image display. A data communication line for supplying compressed image information and the CD-ROM 34 as a database are connected to an image data generating apparatus 91. Image data generated by the image data generating apparatus 91 is inputted to a 20 liquid crystal driver 92 as an image data writing means. The liquid crystal driver 92 transfers the image data to a ferroelectric liquid crystal panel 94 constructed by a pixel array. A decoder 93 is provided at an end of the ferroelectric liquid crystal panel 94.

25 The operation of the second conventional technique

will be described. In accordance with a request of the image data generating apparatus 91, image information compressed according to the MPEG1 standard is supplied from the communication line or the CD-ROM 34 to the 5 image data generating apparatus 91. The image data generating apparatus 91 inputs image data of only rows including a part (called a moving picture part) changed from the previous frame as rewriting part image data to the liquid crystal driver 92. Each time 10 image data of (one row of) pixels of one horizontal line is accumulated, the liquid crystal driver 92 inputs the image data of pixels of one horizontal line in a lump to the ferroelectric liquid crystal panel 94. The decoder 93 designates a row on the pixel array to 15 which the image data is inputted. With respect to a still picture part, previous rewriting image data is stored by using a memory function of the ferroelectric liquid crystal.

The image display having the ferroelectric liquid 20 crystal display is described in the journal of IEICE, Vol. 78, No. 7, pp. 676 to 679, July, 1995, and the like.

SUMMARY OF THE INVENTION

According to the first conventional technique, all 25 of the display pixels are rewritten every frame. Since